

EXHIBT 1-A

PART 2

Appendix 1: Curriculum Vitae of W. A. Dembski

Contact	Baylor University • P. O. Box 7130 • Waco, TX 76798 • tel 254-710-4928 (office) • fax 254-710-4713 • email: nospam@baylor.edu (substitute “William_Dembski” for “nospam”) • website: www.designinference.com		
Position	Associate Research Professor in the Conceptual Foundations of Science at Baylor University; Senior Fellow with Discovery Institute’s Center for Science and Culture; Executive Director of the International Society for Complexity, Information, and Design (www.iscid.org)		
Education	Ph.D.	philosophy	University of Illinois at Chicago 1996
	M.Div.	theology	Princeton Theological Seminary 1996
	M.A.	philosophy	University of Illinois at Chicago 1993
	Ph.D.	mathematics	University of Chicago 1988
	S.M.	mathematics	University of Chicago 1985
	M.S.	statistics	University of Illinois at Chicago 1983
	B.A.	psychology	University of Illinois at Chicago 1981
References	<p>Michael Behe—Professor of Biochemistry (mjbl@lehigh.edu) Dept. of Biology, Lehigh University, Bethlehem, Pennsylvania</p> <p>Robert Kaita—Principal Research Physicist (kaita@pppl.gov) Princeton Plasma Physics Laboratory, Princeton, New Jersey</p> <p>Robert Koons—Professor of Philosophy (rkoons@mail.utexas.edu) Dept. of Philosophy, University of Texas, Austin, Texas</p> <p>Henry Schaefer III—Professor of Chemistry (hfs@arches.uga.edu) Dept. of Chemistry, University of Georgia, Athens, Georgia</p>		
Fellowships/Awards	<p>Texas A&M’s Trotter Prize, shared with Stuart Kauffman, April 2005 Past recipients: Charles Townes and Francis Crick (2002) Alan Guth and John Polkinghorne (2003) Paul Davies and Robert Shapiro (2004)</p> <p>Intelligent Design Network’s Wedge of Truth Award, 2004 for promoting intelligent design (past recipients include Michael Behe)</p> <p>Templeton Foundation Book Prize (\$100,000) for writing book on information theory, 2000–2001</p> <p>Discovery Institute Fellowship for research in intelligent design, 1996–1999</p> <p>Notre Dame Postdoctoral Fellowship (Department of Philosophy) for philosophy of religion, 1996–1997</p> <p>University of Illinois at Chicago, Outstanding Dissertation Award in Fine Arts and Humanities for <i>The Design Inference</i>; published subsequently September 1998 with Cambridge University Press</p> <p>Pascal Centre Research Fellowship for studies in science and religion, 1992–1995</p> <p>Northwestern University Postdoctoral Fellowship (Department of Philosophy) for history and philosophy of science, 1992–1993</p> <p>National Science Foundation Postdoctoral Fellowship for mathematics, 1988–1991</p> <p>McCormick Fellowship (University of Chicago) for mathematics, 1984–1988</p> <p>National Science Foundation Graduate Fellowship for psychology and mathematics, 1982–1985</p> <p>Nancy Hirshberg Memorial Prize for best undergraduate research paper in psychology at the University of Illinois at Chicago, 1981.</p>		

Academic Experience

Associate Research Professor, Conceptual Foundations of Science, Baylor University research in intelligent design, 1999–present
 Fellow, Discovery Institute, Center for the Renewal of Science and Culture research in complexity, information, and design, 1996–present
 Adjunct Assistant Professor, University of Dallas, Department of Philosophy teaching introduction to philosophy, 1997–1999
 Postdoctoral Fellow, University of Notre Dame, Department of Philosophy teaching philosophy of religion + research, 1996–1997
 Independent Scholar, Pascal Centre, Hamilton, Ontario, Canada research in complexity, information, and design, 1993–1996
 Postdoctoral Fellow, Northwestern University, Department of Philosophy teaching philosophy of science + research, 1992–1993
 Research Associate, Princeton University, Department of Computer Science research in cryptography & complexity theory, 1990
 Postdoctoral Visiting Fellow, University of Chicago, James Franck Institute research in chaos & probability, 1989
 Postdoctoral Visiting Fellow, MIT, Department of Mathematics research in probability theory, 1988
 Lecturer, University of Chicago, Department of Mathematics teaching undergraduate mathematics, 1987–1988

Professional Associations

Discovery Institute—senior fellow
 Wilberforce Forum—senior fellow
 International Society for Complexity, Information, and Design
 —executive director
Progress in Complexity, Information, and Design—general editor
 Foundation for Thought and Ethics—academic editor
 American Mathematical Society
 Evangelical Philosophical Society
 American Scientific Affiliation

Books

The Design of Life: Discovering Signs of Intelligence in Biological Systems (biology textbook coauthored with Michael Behe, Jonathan Wells, Percival Davis, and Dean Kenyon). Dallas.: Foundation for Thought and Ethics, forthcoming 2005.
The Design Revolution: Answering the Toughest Questions about Intelligent Design. Downer's Grove, Ill.: InterVarsity Press, 2004.
No Free Lunch: Why Specified Complexity Cannot Be Purchased without Intelligence. Lanham, Md.: Rowman & Littlefield, 2002.
Science and Evidence for Design in the Universe, Proceedings of the Wethersfield Institute, vol. 9 (coauthored with Michael J. Behe and Stephen C. Meyer). San Francisco: Ignatius Press, 2000.
Intelligent Design: The Bridge between Science and Theology. Downer's Grove, Ill.: InterVarsity Press, 1999. [Award: *Christianity Today's* Book of the Year in the category "Christianity and Culture." Translated into Finnish and Korean. Translation into Spanish in preparation.]
The Design Inference: Eliminating Chance through Small Probabilities. Cambridge: Cambridge University Press, 1998. [CUP's best-selling philosophical monograph.]

Edited Collections

- A Man for This Season: The Phillip Johnson Celebration Volume* (co-edited with Jed Macosko, Festschrift collection in honor of Phillip Johnson). Downer's Grove, Ill.: InterVarsity Press, forthcoming 2005.
- Debating Design: From Darwin to DNA* (co-edited with Michael Ruse). Cambridge: Cambridge University Press, 2004.
- Uncommon Dissent: Intellectuals Who Find Darwinism Unconvincing*. Wilmington, Del.: Intercollegiate Studies Institute, 2004.
- Signs of Intelligence: Understanding Intelligent Design* (co-edited with James Kushiner). Grand Rapids, Mich.: Brazos Press, 2001. [Translation into Indonesian in preparation.]
- Unapologetic Apologetics: Meeting the Challenges of Theological Studies* (co-edited with Jay Wesley Richards; selected papers from the Apologetics Seminar at Princeton Theological Seminary, 1995–1997). Downer's Grove, Ill.: InterVarsity Press, 2001.
- Mere Creation: Science, Faith, and Intelligent Design* (proceedings of a conference on design and origins at Biola University, 14–17 November 1996). Downer's Grove, Ill.: InterVarsity Press, 1998.

Books in Preparation

- Freeing Inquiry from Ideology: A Michael Polanyi Reader*, co-edited with Bruce Gordon; an anthology of Michael Polanyi's writings, book under contract with InterVarsity Press.
- Being as Communion: The Metaphysics of Information*, Templeton Book Prize project, book under contract with Ashgate publishers for series in science and religion.
- The End of Christianity*, book under contract with Broadman & Holman.
- The Mathematical Foundations of Intelligent Design*. Technical research monograph.
- The Nature of Nature*, co-edited with Bruce Gordon, conference retrospective on the *Nature of Nature* conference at Baylor, 12–15 April 2000, book award through Grace Valley Christian Center, Davis, California.
- The End of Materialism*, co-edited collection with Jeffrey Schwartz and Mario Beauregard.
- The Patristic Understanding of Creation*, co-edited with Brian Frederick, anthology of writings from the Church Fathers on creation and design.

Publications**in progress**

- Series of technical mathematical articles collected together under the rubric *The Mathematical Foundations of Intelligent Design*. Topics to include variational information (relevant article presently under submission), uniform probability, displacement/no free lunch theorems, Bayesian methods, Fisherian methods, specification, universal probability bounds, specified complexity, configurational entropy, and conservation of information/fourth law of thermodynamics.
- "In Defense of Intelligent Design," *The Oxford Handbook of Religion and Science*, edited by Philip Clayton.

to be submitted

- "Searching Large Spaces: Displacement and the No Free Lunch Regress." Available online at www.designinference.com.

forthcoming

- "Information as a Measure of Variation." *Complexity*. Available online at www.designinference.com
- "Intelligent Design." In *The Encyclopedia of Religion*, 2nd edition, edited by Lindsay Jones. New York: Macmillan.
- "Transcendence," *New Dictionary of Christian Apologetics* (British InterVarsity), available online at www.designinference.com.
- "Does the Design Argument Show There Is a God?" In *The Apologetics Study Bible*, general editor Ted Cabal. Nashville, Tenn.: Broadman & Holman, forthcoming.
- "Reflections on Human Origins," *Progress in Complexity, Information, and Design*.
- "Dealing with the Backlash against Intelligent Design." In William A. Dembski and Jed Macosko, eds., *A Man for This Season: The Phillip Johnson Celebration Volume*. Downers Grove, Ill.: InterVarsity.

2004

- "Irreducible Complexity Revisited," *Progress in Complexity, Information, and Design* 3(1) (2004): available online at http://www.iscid.org/papers/Dembski_IrreducibleComplexityRevisited_011404.pdf.
- "Everything that Rises Must Converge," review of Simon Conway Morris's book *Life's Solution: Inevitable Humans in a Lonely Universe*, *Books & Culture* (Nov/Dec 2004): 42.
- "An Information-Theoretic Design Argument," in Francis Beckwith, William Lane Craig, and J. P. Moreland, eds., *To Everyone and Answer: A Case for the Christian Worldview* (volume in honor of Norman Geisler), 77–94. Downers Grove, Ill.: InterVarsity, 2004.
- "The Myths of Darwinism." In *Uncommon Dissent: Intellectuals Who Find Darwinism Unconvincing*.
- "The Logical Underpinnings of Intelligent Design." In *Debating Design: From Darwin to DNA*.
- "The New Age of Information," *World Magazine*, 3 April 2004: 45–47. Available online at www.designinference.com/documents/2004.04.Darwins_Meltdown.htm.
- Foreword to Geoffrey Simmons's *What Darwin Didn't Know*. Eugene, Oregon: Harvest House, 2004.
- "Five Questions Evolutionists Would Rather Dodge," *Citizen Magazine*, web version, April 2004: <http://www.family.org/cforum/citizenmag/webonly/a0031659.cfm>. Unedited version available at www.designinference.com.

2003

- "Response to Paul Gross," *Science Insights*, November 2003: 10–14. Available online at http://www.nas.org/publications/sci_newslst/7_5/7-5_letters.pdf.
- "Skepticism's Prospects for Unseating Intelligent Design." In Paul Kurtz, ed., *Science and Religion: Are They Compatible?* Amherst, N.Y.: Prometheus Books, 2003.
- Five entries in the Macmillan *Encyclopedia of Science and Religion*, 2003, edited by Wentzel van Huyssteen: "Algorithm," "Algorithmic Complexity," "Boundary Conditions," "Dissipative Structures," and "Teleological Argument."
- "Intelligent Design Theory." In *Religion in Geschichte und Gegenwart*, 4th edition, edited by Hans Dieter Betz, Don S. Browning, Bernd Janowski, Eberhard Jüngel. Tübingen: Mohr Siebeck, 2003.
- "The Act of Creation: Bridging Transcendence and Immanence." In Mehrdad M. Zarandi, ed., *Science and the Myth of Progress*. Bloomington, Ind.: World Wisdom, 2003.

2002

- "Challenging Materialism's Chokehold on Science" (book review of Jeffrey Schwartz and Sharon Begley's *The Mind and the Brain*). First Things no. 103, 2003:
<http://www.firstthings.com/ftissues/ft0305/reviews/dembski.html>. Un-edited review at www.designinference.com.
- "The Chance of the Gaps." In Neil Manson, ed., *God and Design: The Teleological Argument and Modern Science* (London: Routledge, 2002), 251–274.
- "Can Evolutionary Algorithms Generate Specified Complexity?" In *From Complexity to Life: On the Emergence of Life and Meaning*, edited by Niels H. Gregersen, foreword by Paul Davies (Oxford: Oxford University Press, 2002), 93–113.
- "The Design Argument," in *Science and Religion: A Historical Introduction*, edited by Gary B. Ferngren (Baltimore: Johns Hopkins Press, 2002), 335–344.
- "Detecting Design in the Natural Sciences," *Natural History* 111(3), April 2002: 76.
- "How the Monkey Got His Tail," *Books & Culture*, November/December 2002: 42 (book review of S. Orzack and E. Sober, *Adaptationism and Optimality*).
- MESA (Monotonic Evolutionary Simulation Algorithm). A Java program by William Dembski, John Bracht, and Micah Sparacio that models evolutionary searches and employs monotonic smooth fitness gradients. Its aim is to determine the degree to which fitness perturbation and variable coupling impede evolutionary searches. Available at www.iscid.org/mesa.
- "Can Functional Logic Take the Place of Intelligent Design? Response to Walter Thorson." *Perspectives on Science and Christian Faith* 54(1) (2002): 22–23.
- "Not Taking Information Seriously Enough." Review of James E. Huchingson, *Pandemonium Tremendum: Chaos and Mystery in the Life of God* (Cleveland: Pilgrim Press, 2001). Appeared in *Princeton Theological Seminary Bulletin* 23(1) (2002): 114–116. Available online at www.designinference.com.
- "Darwin's Predictable Defenders: A Response to Massimo Pigliucci." *Christian Research Journal* 25(1) 2002: available online at <http://www.equip.org/free/DS701.pdf>. One of four essays as part of "Science and Religion 2002: A Response to *Skeptical Inquirer*."
- "Why Natural Selection Can't Design Anything," *Progress in Complexity, Information, and Design* 1(1), 2002:
http://iscid.org/papers/Dembski_WhyNatural_112901.pdf.
- "Random Predicate Logic I: A Probabilistic Approach to Vagueness," *Progress in Complexity, Information, and Design* 1(2-3), 2002:
http://www.iscid.org/papers/Dembski_RandomPredicate_072402.pdf.
- "Another Way to Detect Design?" *Progress in Complexity, Information, and Design* 1(4), 2002:
http://iscid.org/papers/Dembski_DisciplinedScience_102802.pdf.
- "Evolution's Logic of Credulity: An Unfettered Response to Allen Orr," *Progress in Complexity, Information, and Design* 1(4), 2002:
http://www.iscid.org/papers/Dembski_ResponseToOrr_010703.pdf
- "What Have Butterflies Got to Do with Darwin?" Review of Bernard d'Abrera's *Concise Atlas of Butterflies*. *Progress in Complexity, Information, and Design* 1(1), 2002:
http://www.iscid.org/papers/Dembski_BR_Butterflies_122101.pdf.
- "Refuted Yet Again!" A reply to Matt Young published with metanexus.net. (Young has since co-edited a collection titled *Why Intelligent Design Fails* with Rutgers University Press, 2004). Article available online at www.designinference.com.
- Foreword to Benjamin Wiker's *Moral Darwinism: How We Became Hedonists*. Downers Grove, Ill.: InterVarsity Press, 2002.
- Foreword to Peter S. Williams's *The Case for Angels*. Carlisle, UK: Paternoster Press, 2002.

2001

- “Where Do We Go From Here,” *Perspectives on Science and Christian Faith* 53(4), December 2001: 283-291 (with Paul Anderson, Loren Haarsma, and Susan Drake Emmerich; transcript of panel discussion at Mundelein conference, 2000, titled *Asking the Right Questions*).
- “The Possibility of Detecting Intelligent Design.” *Mathematics in a Postmodern Age: A Christian Perspective*, edited by James Bradley and Russell Howell (Grand Rapids, Mich.: Eerdmans, 2001), 278–308.
- “The Pragmatic Nature of Mathematical Inquiry.” *Mathematics in a Postmodern Age: A Christian Perspective*, edited by James Bradley and Russell Howell (Grand Rapids, Mich.: Eerdmans, 2001), 98–130.
- “Detecting Design by Eliminating Chance: A Response to Robin Collins.” In *Christian Scholar’s Review* 30(3), Spring 2001: 343–357.
- “Intelligent Design Coming Clean.” Montville, N.J.: Digital Publishing Solutions, 2001. [Originally published through Metanexus.net.]
- “Is Intelligent Design a Form of Natural Theology?” Published with metanexus.net. Available at www.designinference.com.
- “What Have Butterflies Got to Do with Darwin?” Review of Bernard d’Abrera’s *The Concise Atlas of Butterflies of the World* (London: Hill House, 2001). Published with metanexus.net.
- Foreword to Neil Broom’s *How Blind Is the Watchmaker?*. Downers Grove, Ill.: InterVarsity Press, 2001.

2000

- “Naturalism and Design.” In *Naturalism: A Critical Analysis*, edited by William Lane Craig and J. P. Moreland (London: Routledge, 2000).
- “Conservatives, Darwin & Design: An Exchange” (co-authored with Larry Arnhart and Michael J. Behe). *First Things* no. 107 (November 2000): 23–31.
- “The Third Mode of Explanation.” In *Science and Evidence for Design in the Universe*.
- “Mechanism, Magic, and Design,” *Christian Research Journal* 23(2) 2000: available online at <http://www.equip.org/free/DM808.htm>.
- “What Can We Reasonably Hope For? — A Millennium Symposium.” *First Things* no. 99, January 2000: 19–20.
- “Who’s Got the Magic.” Response to Robert Pennock, published initially at metanexus.net. Reprinted without permission in Robert Pennock, ed., *Intelligent Design Creationism and Its Critics: Philosophical, Theological, and Scientific Perspectives* (Cambridge, Mass.: MIT Press, 2001), 639–644.
- “Disbelieving Darwin—And Feeling No Shame!” Published initially at metanexus.net, available at www.designinference.com. Revised version published as “Shamelessly Doubting Darwin,” *American Outlook* (November/December 2000): 22–24.
- “Because It Works, That’s Why!” (review of Y. M. Guttman’s *The Concept of Probability in Statistical Physics*). *Books & Culture*, March/April 2000: 42–43.
- “The Design Argument.” In *The History of Science and Religion in the Western Tradition: An Encyclopedia*, edited by Gary B. Ferngren (New York: Garland, 2000), 65–67.
- “The Limits of Natural Teleology” (review of Robert Wright’s *Nonzero: The Logic of Human Destiny*). *First Things* no. 105 (August/September 2000): 46–51.
- “Intelligent Design Is Not Optimal Design.” Response to Francisco Ayala, posted initially at metanexus.net. Available online at www.designinference.com.

1999

- “Signs of Intelligence: A Primer on the Discernment of Intelligent Design.” *Touchstone* 12(4), 1999: 76–84.
- “Are We Spiritual Machines?” *First Things* no. 96, October 1999: 25–31.

- "Not Even False? Reassessing the Demise of British Natural Theology." *Philosophia Christi* 2nd series, 1(1), 1999: 17–43.
- "The Last Magic" (review of Mark Steiner's *The Applicability of Mathematics as a Philosophical Problem*). *Books & Culture*, July/August 1999. [Award: Evangelical Press Association, First Place for 1999 in the category "Critical Reviews."]
- "Thinkable and Unthinkable" (review of Paul Davies's *The Fifth Miracle*). *Books & Culture*, September/October 1999: 33–35.
- "The Arrow and the Archer: Reintroducing Design into Science." *Science & Spirit* 10(4), 1999(Nov/Dec): 32–34, 42.
- 1998
- "Randomness." In *Routledge Encyclopedia of Philosophy*, edited by Edward Craig. London: Routledge, 1998.
- "Reinstating Design within Science." *Rhetoric and Public Affairs* 1(4), 1998: 503–518. Reprinted in John Angus Campbell and Stephen C. Meyer, eds., *Darwinism, Design, and Public Education*. East Lansing, Mich.: Michigan State University Press, 2003: 403–417.
- "Fruitful Interchange or Polite Chitchat? The Dialogue between Theology and Science" (co-authored with Stephen C. Meyer). *Zygon* 33(3), 1998: 415–430.
- "Mere Creation." In *Mere Creation: Science, Faith, and Intelligent Design*.
- "Redesigning Science." In *Mere Creation: Science, Faith, and Intelligent Design*.
- "Science and Design." *First Things* no. 86, October 1998: 21–27.
- "Intelligent Design: The New Kid on the Block." *The Banner* 133(6), 16 March 1998: 14–16.
- "The Intelligent Design Movement." *Cosmic Pursuit* 1(2), 1998: 22–26.
- "The Bible by Numbers" (review of Jeffrey Satinover's *Cracking the Bible Code*). *First Things*, August/September 1998 (no. 85): 61–64.
- 1997
- "Intelligent Design as a Theory of Information" (revision of 1997 NTSE conference paper). *Perspectives on Science and Christian Faith* 49(3), 1997: 180–190. Reprinted without permission in Robert Pennock, ed., *Intelligent Design Creationism and Its Critics: Philosophical, Theological, and Scientific Perspectives* (Cambridge, Mass.: MIT Press, 2001), 553–573.
- "Christology and Human Development." *Foundations* 5(1), 1997: 11–18.
- 1996
- "Schleiermacher's Metaphysical Critique of Miracles." *Scottish Journal of Theology* 49(4), 1996: 443–465.
- "Transcendent Causes and Computational Miracles." In *Interpreting God's Action in the World (Facets of Faith and Science, volume 4)*, edited by J. M. van der Meer. Lanham: The Pascal Centre for Advanced Studies in Faith and Science/ University Press of America, 1996.
- "The Problem of Error in Scripture." *Princeton Theological Review* 3(1)(double issue), 1996: 22–28.
- "Teaching Intelligent Design as Religion or Science?" *Princeton Theological Review* 3(2), 1996: 14–18.
- "The Paradox of Politicizing the Kingdom." *Princeton Theological Review* 3(1)(double issue), 1996: 35–37.
- "Alchemy, NK Boolean Style" (review of Stuart Kauffman's *At Home in the Universe*). *Origins & Design* 17(2), 1996: 30–32.
- 1995
- "What Every Theologian Should Know about Creation, Evolution, and Design." *Princeton Theological Review* 2(3), 1995: 15–21.
- "The Fallacy of Contextualism." *Themelios* 20(3), 1995: 8–11.
- "The God of the Gaps." *Princeton Theological Review* 2(2), 1995: 13–16.

- 1994 "The Incompleteness of Scientific Naturalism." In *Darwinism: Science or Philosophy?* edited by Jon Buell and Virginia Hearn (Proceedings of the Darwinism Symposium held at Southern Methodist University, 26–28 March 1992), pp. 79–94. Dallas: Foundation for Thought and Ethics, 1994.
- "On the Very Possibility of Intelligent Design." In *The Creation Hypothesis*, edited by J. P. Moreland, pp. 113–138. Downers Grove: InterVarsity Press, 1994.
- 1991 "Randomness by Design." *Nous* 25(1), 1991: 75–106.
- "Reviving the Argument from Design: Detecting Design through Small Probabilities." *Proceedings of the 8th Biannual Conference of the Association of Christians in the Mathematical Sciences* (at Wheaton College), 29 May – 1 June 1991: 101–145.
- 1990 "Uniform Probability." *Journal of Theoretical Probability* 3(4), 1990: 611–626.
- "Reverse Diffusion-Limited Aggregation." *Journal of Statistical Computation and Simulation* 37(3&4), 1990: 231–234.
- "Scientopoly: The Game of Scientism." *Epiphany Journal* 10(1&2), 1990: 110–120.
- "Converting Matter into Mind: Alchemy and the Philosopher's Stone in Cognitive Science." *Perspectives on Science and Christian Faith* 42(4), 1990: 202–226. Abridged version in *Epiphany Journal* 11(4), 1991: 50–76. My response to subsequent critical comment: "Conflating Matter and Mind" in *Perspectives on Science and Christian Faith* 43(2), 1991: 107–111.
- "Inconvenient Facts: Miracles and the Skeptical Inquirer." *Philosophia Christi* (formerly *Bulletin of the Evangelical Philosophical Society*) 13, 1990: 18–45.

Professional Activities

- 2005 Debate on the scientific status of intelligent design with Lee Silver, Princeton University, 7 April, 2005.
- "Intelligent Design's Place in the Natural Science" and "Searching Large Spaces." Talks to be presented as part of Trotter Prize Lectures, Texas A&M University, 4 April 2005.
- "The Scientific Basis for Intelligent Design," presented at the Intelligent Design Symposium organized by the Intelligent Design and Evolution Awareness (IDEA) Club at the University of Texas at Dallas, 26 March 2005.
- Debates and panel discussions on ID at Columbia University and NYU with Robert Shapiro, 8–10 February 2005.
- 2004 "Doubts about Unintelligent Evolution," Society of Christian Philosophers, invited lecture, with Sahotra Sarkar as respondent, annual AAR meeting, San Antonio, 22 November 2004.
- "Darwin's Berlin Wall," Evangelical Philosophical Society, invited plenary lecture at annual ETS meeting, San Antonio, 18 November 2004.
- Fall 2004: Lectures at University of New Mexico, Belhaven College, Wayne State University, and Taylor University
- "Intelligent Design: The State of the Research Program," *National Faculty Leadership Conference*, organized by Christian Leadership Ministries, Washington, DC, 25 June 2004.
- Lecture tour of Denmark: 10 May, University of Aarhus, Danish Science-Theology Forum; 11–12 May, University of Copenhagen, two lectures, Department of Systematic Theology; 12 May, Technical University of Denmark, "The Design Inference as an Extension of Fisherian Significance Testing"; 13 May, Niels Bohr Institute, "Intelligent Design and Self-Organization."
- Speaker and panelist, conference titled *Intelligent Design and the Future of Science*, Biola University, 22–24 April 2004.

Dual debates at UCLA as part of Veritas Forum, Jeffrey Schwartz and William Dembski vs. Michael Shermer and Niall Shanks respectively, taped 21 April 2004 and subsequently televised by CSPAN2.

"Mathematics as an Experimental Science," talk given at Baylor conference titled *Christianity and the Soul of the University: Faith as a Foundation for Intellectual Community*, 26 March 2004. Based on paper titled "The Pragmatic Nature of Mathematical Inquiry," in the edited collection by James Bradley and Russ Howell.

Claremont-McKenna lectures on intelligent design, spring 2004 (featuring Michael Behe, Eugenie Scott, and William Dembski). Dembski spoke on 2 Marcy 2004.

Lectures on intelligent design at UC Davis and Grace Valley Christian Center, organized by Richard Spencer, 16–17 January 2004.

2003

Lectures at Oxford University on intelligent design at the Ian Ramsey Centre and Oxford Centre for Hindu Studies as well as to the Joseph Butler Society, 29–30 October 2003.

Extended academic debate over intelligent design with Michael Ruse, sponsored by the Honors College at the University of Central Arkansas, 14–16 October 2003.

SETI Institute radio debate with Massimo Pigliucci, moderated by Seth Shostak, 12 October 2003.

"Infinite Universe or Intelligent Design?" Paper delivered at 2003 Accelerating Change Conference at Stanford University, 13 September 2003. Available online at www.designinference.com.

Participant, seminar on the role of technology in culture and society, organized by Walter Bradley, Baylor University, 26 May – 6 June 2003.

"Making the Task of Theodicy Impossible? Intelligent Design and the Problem of Evil," invited paper delivered under the auspices of the Center for Theology and the Natural Sciences (CTNS) at the Graduate Theological Union (GTU) in Berkeley, 1 April 2003.

Speaking tour of Auckland, New Zealand, including seminars on intelligent design at the University of Auckland and various theological institutions, 10–19 March 2003.

"The Design Revolution." *Norton Lectures*, Southern Baptist Theological Seminary, Louisville, Kentucky, 11 & 12 February 2003. [endowed lectures]

Taping for JESUS Film Apologetics Version, Southern California, 15 January 2003.

Invited to speak on intelligent design at Southwest Texas State University (6 February), SMU (25 March), and University of Maine (9 April).

2002

"ID's Positive Contribution to Biology's Information Problem," *The Intelligent Design Debate*, symposium featuring also Michael Ruse, Larry Arnhart, Michael Behe, Mano Singham, Niles Eldredge, Jonathan Wells, Hillsdale College, 10–13 November 2002.

"Becoming a Disciplined Science: Prospects, Pitfalls, and Reality Check for ID," keynote address, *RAPID Conference* (Research and Progress in Intelligent Design), Biola University, La Mirada, California, 25–27 October 2002. Available online at www.designinference.com.

Debate titled "God or Luck: Creationism vs. Evolution," with Steven Darwin, professor of botany, Tulane University, New Orleans, 7 October 2002. Frank Tipler organized this debate.

"Skepticism's Prospects for Unseating Intelligent Design," Fourth World Skeptics Conference, *Prospects for Skepticism: The Next Twenty-Five Years*, Burbank, California, 20-23 June 2002. Symposium debate with Paul Nelson vs. Kenneth Miller and Wesley Elsberry.

Presenter on intelligent design, *Imago Dei AD 2002*, conference sponsored by Charles W. Colson and the Wilberforce Forum, Dallas, 15 June 2002.

"The Cultural Significance of Intelligent Design," *Imago Dei AD 2002: Incarnational Living in a Secular Society*, sponsored by BreakPoint, Irving, Texas, 15 June 2002.

"Does Evolution Even Have a Mechanism," symposium on intelligent design featuring also Michael Behe, Kenneth Miller, Robert Pennock, and Eugenie Scott, American Museum of Natural History, New York, 23 April 2002. Available online at http://www.iscid.org/papers/Dembksi_DoesEvolution_050202.pdf. See also <http://www.actionbioscience.org/evolution/nhmag.html>.

"Blueprint for a Revolution," *Intelligent Design Conference*, Palm Beach Atlantic College, Palm Beach, Florida, 13-14 April 2002.

Canadian lecture tour on intelligent design (University of Guelph, University of Toronto, and McMaster University), sponsored by the Canadian Scientific and Christian Affiliation, 6-8 March 2002.

"Intelligent Design." *Staley Lectures*, Anderson College, Anderson, South Carolina, 15 & 16 January 2002. [**endowed lectures**]

2001

Founded with John Bracht and Micah Sparacio the International Society for Complexity, Information, and Design (www.iscid.org).

Program titled "Darwin under the Microscope," PBS television interview for *Uncommon Knowledge* with Peter Robinson facing Eugenie Scott and Robert Russell, 7 December 2001.

Public discussion with Stuart Kauffman, "Order for Free vs. No Free Lunch," Center for Advanced Studies, University of New Mexico, 13 November 2001.

Debate with Michael Shermer, "Does Science Prove God?" Clemson University, 7 November 2001.

Debate with Massimo Pigliucci, "Is Intelligent Design Smart Enough?" New York Academy of Sciences, 1 November 2001.

"Another Way to Detect Design?" "Why Natural Selection Can't Design Anything," and "The Chance of the Gaps." Three papers presented as keynote speaker at Society of Christian Philosophers meeting, Boulder, Colorado, 4-6 October 2001.

Panel discussion on Houston PBS station regarding PBS evolution series, which finished that night, 27 September 2001.

Presenter, on topic of detecting design, 23-27 July 2001 at Wycliffe Hall, Oxford University in the John Templeton Oxford Seminars on Science and Christianity.

Focus on the Family broadcast taping with James Dobson, 6 July 2001.

Presenter, Darwin, Design & Democracy II, conference organized by the Intelligent Design Network, Kansas City, Missouri, 29-30 June 2001.

"Intelligent Design as a Theory of Technological Evolution." *Interpreting Evolution*, AAAS conference at Haverford College, 14-19 June 2001. Paper available online at www.designinference.com.

Participant, "Mathematical Modeling and Complexity Seminar," organized by Michael Veatch at Calvin College, 2-4 June 2001.

"The Probabilistic Detection of Design" and "New Directions in Information Theory: From Shannon Information to Specified Complexity." Keynote talks at biannual meeting of the Association of Christians in the Mathematical Sciences, Calvin College, 31 May - 2 June 2001.

Participant, Symposium on Design Reasoning, Calvin College, 22-23 May 2001. Other participants were Stephen Meyer, Paul Nelson, Rob Koons, Del Ratzsch, Robin Collins, Tim & Lydia McGrew. Tim will edited the proceedings for an academic press.

Radio debate with Eugenie Scott, Diane Rehm Show, NPR, 18 April 2001 (in response to James Glanz's front page story on intelligent design in the *New York Times*, 8 April 2001).

Invited to speak on intelligent design at University of Georgia (21–23 February), University of South Carolina (1–3 April), UCSD (23–26 April), and SMU (11 September), Texas A&M (18 September), Fort Lewis College, Durango, Colorado (16 October)

2000

“No Free Lunch: Why Specified Complexity Requires Intelligence.” *Science and Evidence for Design in the Universe*. Conference at Yale University, 2–4 November 2000.

Panelist, “Where Do We Go From Here?” at conference sponsored by ASA, IVCF, and Templeton in Mundelein, Illinois titled *Asking the Right Questions: Christian Faith and the Choice of Research Topic in the Natural and Applied Sciences*, 13–15 October 2000.

“Intelligent Design and the End of Reason,” Houston Christian Worldview Conference, sponsored by Charles W. Colson and the Wilberforce Forum, 23 September 2000.

“Detecting Design in the Natural Sciences.” Talks presented at two conferences: *Design and Its Critics* (Concordia University, Mequon, Wisconsin, 22–24 June 2000); *‘Intelligent Design’: Science and Theology in Consonance?* (University of New Brunswick, Fredericton, 15–16 September 2000).

Contributor, “Prospects for Post-Darwinian Science,” symposium, New College, Oxford, August 2000. Other contributors included Michael Denton, Peter Saunders, Mae-Wan Ho, David Berlinski, Jonathan Wells, Stephen Meyer, and Simon Conway Morris.

Seminar Organizer, “Design, Self-Organization, and the Integrity of Creation,” Calvin College Seminar in Christian Scholarship, 19 June – 28 July 2000. Follow-up conference 24–26 May 2001 (speakers included Alvin Plantinga, John Haught, and Del Ratzsch).

Intelligent design lecture tour of South Korea, sponsored by Manmin Church, including lecture at Hankuk University of Foreign Studies on 17 May (moderator: Kwang-youl Kim; interpreter: Joon-ha Hwang).

“Can Evolutionary Algorithms Generate Specified Complexity?” *The Nature of Nature*. Conference on the role of naturalism in science, Baylor University, 12–15 April 2000.

The Nature of Nature, conference at Baylor University, 12–15 April 2000, organized by WmAD and Bruce Gordon. For details, see: http://www.designinference.com/documents/2000.04.nature_of_nature.htm

“Intelligent Design: Yesterday's Orthodoxy, Today's Heresy,” Evangelical theological Society Southwest Regional Meeting, organized by Douglas Blount at Southwestern Baptist Theological Seminary, 7 April 2000.

“Intelligent Design: Bridging Science and Faith.” *Staley Lectures*, Union University, Tennessee, 28 February – 1 March 2000. [endowed lectures]

Taught course on intelligent design, Trinity International University, Santa Ana, Calif., spring 2000.

1999

Symposiast at Templeton sponsored Santa Fe conference organized by Paul Davies titled *Complexity, Information, and Design: A Critical Appraisal*, 14–16 October 1999. Presented paper that in 2002 was published in an edited collection by fellow symposiast Niels Gregersen (“Can Evolutionary Algorithms Generate Specified Complexity?”).

Participant, Templeton sponsored conference titled *Empathy, Altruism and Agape: Perspectives on Love in Science and Religion* at MIT, 1–3 October 1999.

“Detecting Design in Nature,” symposium at NYU sponsored by the Homeland Foundation, fall 1999.

- “The Third Mode of Explanation: Distinguishing Design from Chance and Necessity.” Roundtable discussion with Archbishop Joseph Zycinski, University of Chicago, 22 April 1999.
- “The Design Inference.” 140th Anniversary of Darwin’s *Origin of Species*, Trinity Graduate School, Fullerton, California, 13 March 1999.
- Participant, Liberty Fund Colloquium, “Liberty and Responsibility in the Writings of Charles Darwin,” Tucson, Arizona, 28–31 January 1999.
- Invited to speak on intelligent design at Texas A&M (25–26 March, Walter Bradley, organizer), Wheaton College (April), MIT (7 April), Tufts (8 April), John Brown University (31 July, Amer. Sci. Aff. meeting), Texas Tech (29 October), GeorgiaTech (5 November), Lycoming College (18 November), Biola University (3 December).
- 1998
- Discussion about *The Design Inference*, organized by Robert Koons, with Cory Juhl and Sahotra Sarkar, University of Texas, Austin, October 1998.
- Lecture on Naturalism to the annual meeting of Salem Communications, Dallas, 30 October 1998.
- “The Design Inference.” World Congress of Philosophy, Boston, 14 August 1998.
- “The Act of Creation: Bridging Transcendence and Immanence.” Millstatt Forum, Strasbourg, France, 10 August 1998.
- Faculty in theology and science at the C. S. Lewis International Centennial Celebration, *Loose in the Fire*. Oxford and Cambridge Universities, 19 July to 1 August 1998.
- “Science, Theology, and Intelligent Design.” *Staley Lectures*, Central College, Iowa, 4–5 March 1998. [endowed lectures]
- Canadian lecture tour on intelligent design (Simon Fraser University, University of Calgary, and University of Saskatchewan), sponsored by the New Scholars Society, 4–6 February 1998.
- 1997
- “Intelligent Design as a Theory of Information.” *Naturalism, Theism, and the Scientific Enterprise*. Conference organized by Robert Koons on the scientific status of intelligent design at the University of Texas at Austin, 20 – 23 February 1997.
- 1996
- “Redesigning Science.” Presentation at *Mere Creation* conference.
- Organizer with Richard McGee and Paul Nelson of *Mere Creation* conference on design and origins at Biola University, 14 – 17 November 1996.
- PBS’s *Inside the Law* with Jack Ford, program devoted to design and evolution, featuring William Dembski, Wendell Byrd, Charles Haynes, and Kevin Padian, taped 13 November 1996.
- 1995
- Organized the Charles Hodge Society and the Princeton Apologetics Seminar at Princeton Theological Seminary (*Unapologetic Apologetics* emerged out of that seminar).
- 1994
- Faculty in theology and science at the C. S. Lewis Summer Institute, *Cosmos and Creation*. Cambridge University, Queen’s College, 10–23 July 1994.
- Revived, with Richard Gardiner, the *Princeton Theological Review* at Princeton Theological Seminary. This journal is still in production:
http://www.pfrenewal.org/clients/pfrenewal-org/downloads/publications_PTRSpring04.pdf
- 1993
- “Theoretical Basis for the Design Inference.” *The 48th Annual Meeting of the American Scientific Affiliation*, Seattle Pacific University, 9 August 1993.
- Participant and speaker, The Status of Darwinian Theory and Origin of Life Studies, Pajaro Dunes, California, 22–24 June 1993.

- 1992 “Transcendent Causes and Computational Miracles.” *International Conference on Science and Belief*, Pascal Centre, Ancaster, Ontario, Canada, 11–15 August 1992..
Summer research on design, Cambridge University, sponsored by Pascal Centre (Ancaster, Ontario, Canada), 1 July to 4 August 1992
“The Incompleteness of Scientific Naturalism.” Symposium on Darwinism held at Southern Methodist University, 26–28 March 1992.
- 1991 “Detecting Design through Small Probabilities.” *The 8th Biannual Conference of the Association of Christians in the Mathematical Sciences*, Wheaton College, 30 May 1991 and *The 46th Annual Meeting of the American Scientific Affiliation*, Wheaton College, 29 July 1991.
- 1990 Participant, *International Institute of Human Rights* in Strasbourg France, 28 June to 27 July 1990.
- 1988 “Truth in an Age of Uncertainty and Relativism.” *Dom. Luke Child’s Lecture*, Portsmouth Abbey School, 30 September 1988. [endowed lecture]

Appendix 2: Trotter Prize Press Release

[Note: past winners of this prize include Nobel laureates Charles Townes and Francis Crick.]

For Immediate Release: Tuesday, Mar. 29, 2005

<http://www.science.tamu.edu/story3.asp?storyID=465>

TROTTER PRIZE WINNERS TO EXPLORE ORIGIN OF LIFE

COLLEGE STATION – Two of the nation’s top scientists will visit the Texas A&M University campus next week to discuss one of the hottest topics in modern science as part of the annual Trotter Endowed Lecture Series.

As recipients of Texas A&M’s 2005 Trotter Prize, Dr. William Dembski, an associate research professor in the conceptual foundations of science at Baylor University, and Dr. Stuart Kauffman, director of the Institute for Biocomplexity and Informatics at the University of Calgary, will address the origin of life in a public lecture Monday (April 4) at 7 p.m. in Rudder Theatre. The presentation, which is free and open to the public, will be followed by a reception in the Rudder Exhibit Hall.

Two central questions will form the basis of their scholarly debate: What are the defining features of life, and what causal processes can originate life and subsequently increase its complexity? For Dembski and Kauffman, the answers depend largely on approach, not to mention widely differing perspectives.

Dembski, a proponent of intelligent design, approaches these questions through his notion of “specified complexity,” which he claims resides in living systems and constitutes a form of information that only intelligent agents are capable of generating. His presentation, “Intelligent Design’s Place in the Natural Sciences,” centers on teleology, which is widely disregarded in current evolutionary theory. Dembski will outline intelligent design’s attempts to bring it back into the natural sciences in a way that is rigorous, fruitful and empirically detectable, and also examine its prospects for success.

Kauffman, a self-organizational theorist, counters with his argument for “autonomous agents,” which he characterizes as a self-reproducing system capable of carrying out thermodynamic work cycles. For Kauffman, it is these laws of self-organization, not intelligent design, that promise to explain how communities of autonomous agents can arise and evolve. In “Toward a Physical Definition of Life,” he will analyze Schrodinger’s “What is Life,” which, for all its bio-molecular discoveries—DNA, the genetic code and gene self-regulation, to name but a few—may have missed the overall mark. Kauffman suggests Schrodinger overlooked some core concepts and that others from Darwin render the biosphere incapable of finite pre-description and, therefore, may bear on a response to intelligent design arguments.

“I’m very much looking forward to a spirited discussion among the speakers and the audience,” said Dr. H. Joseph Newton, dean of the College of Science.

A mathematician and a philosopher, Dembski is a senior fellow with Discovery Institute's Center for Science and Culture in Seattle and also executive director of the International Society for Complexity, Information and Design. He has previously taught at Northwestern University, the University of Notre Dame and the University of Dallas and done postdoctoral work in mathematics at MIT, in physics at the University of Chicago, and in computer science at Princeton University. In addition, Dembski is the author/editor of 10 books, including "In The Design Inference: Eliminating Chance Through Small Probabilities."

Kauffman, professor emeritus of biology at the University of Pennsylvania and an external professor and co-founder of the Santa Fe Institute, is a leading thinker on self-organization and the science of complexity as applied to biology. Twenty-five years ago, he developed the Kauffman models, which are random networks exhibiting a kind of self-organization that he terms "order for free." A MacArthur Fellow, he is the founding general partner and chief scientific officer of The Bios Group, a company that applies the science of complexity to business management problems. Kauffman is also a physician, though he no longer practices, as well as a prolific author.

The Trotter Prize and Endowed Lecture Series, presented by the College of Science in collaboration with The Dwight Look College of Engineering, seeks to illuminate connections between science and religion, often viewed in academia as non-overlapping if not rival world views. The series was established by Ide P. Trotter Jr. and Luella H. Trotter with a matching contribution from ExxonMobil Corp. in 2001 to honor Ide P. Trotter Sr., former dean of Texas A&M University's Graduate School, and to recognize pioneering contributions to the understanding of the role of information, complexity and inference in illuminating the mechanisms and wonder of nature.

For more information on the event, contact Sidney Zubik in the College of Science Dean's Office at (979) 845-9642.

- 30 -

Contact: Shana K. Hutchins, (979) 862-1237 or shutchins@science.tamu.edu

Appendix 3: Ten Peer-Reviewed ID Articles (with Annotations)

Does research supporting intelligent design appear in the peer-reviewed scientific literature? In a recent interview with *USA Today* (March 23, 2005), Barbara Forrest, a professor of philosophy at Southeastern Louisiana University and a critic of intelligent design, incorrectly states that “[design theorists] aren’t published because they don’t have any scientific data.”⁵⁷ In fact, they are published and they have scientific data.

What follows is a list of ten peer-reviewed publications that support intelligent design in biology written by proponents of intelligent design. Note, in particular, the two articles by Douglas Axe, which describe experiments in molecular biology and thus present “scientific data” that support intelligent design. Note, in addition, that there is a widely recognized peer-reviewed literature in physics and cosmology that supports intelligent design—see, for instance, the work of Fred Hoyle, Paul Davies, and Guillermo Gonzalez.⁵⁸

- W.A. Dembski, *The Design Inference: Eliminating Chance through Small Probabilities* (Cambridge: Cambridge University Press, 1998).

This book was published by Cambridge University Press and peer-reviewed as part of a distinguished monograph series, *Cambridge Studies in Probability, Induction, and Decision Theory*. The editorial board of that series includes members of the National Academy of Sciences as well as one Nobel laureate, John Harsanyi, who shared the prize in 1994 with John Nash, the protagonist in the film *A Beautiful Mind*. Commenting on the ideas in *The Design Inference*, well-known physicist and science writer Paul Davies remarks: “Dembski’s attempt to quantify design, or provide mathematical criteria for design, is extremely useful. I’m concerned that the suspicion of a hidden agenda is going to prevent that sort of work from receiving the recognition it deserves.” Quoted in L. Witham, *By Design* (San Francisco: Encounter Books, 2003), p. 149. For more about the peer-review of this book, see Appendices 6 and 7.

- D.D. Axe, “Extreme Functional Sensitivity to Conservative Amino Acid Changes on Enzyme Exteriors,” *Journal of Molecular Biology*, 301(3) (2000): 585–595.
- D.D. Axe, “Estimating the Prevalence of Protein Sequences Adopting Functional Enzyme Folds,” *Journal of Molecular Biology*, 341(5) (2004):1295–1315.

These two articles by Douglas Axe show that certain enzymes are extremely sensitive to perturbation. Perturbation in this case does not simply diminish existing function or alter function, but removes all possibility of biological function (in this case, any biologically useful catalytic activity). This implies that neo-Darwinian theory has no purchase on these systems—these systems are unevolvable by Darwinian means. Moreover, the probabilities implicit in such extreme-functional-sensitivity analyses are precisely those needed for a design inference.

- S.C. Meyer, “The Origin of Biological Information and the Higher Taxonomic Categories,” *Proceedings of the Biological Society of Washington*, 117(2) (2004): 213–239.

This article explicitly argues for intelligent design in the origination of the Cambrian fauna. It created an international firestorm within the scientific community when it was published. See the *Wall Street Journal* article in Appendix 8 as well as the following website by the editor who oversaw the article’s peer-review process: <http://www.rsternberg.net>.

- M.J. Behe and D.W. Snoke, “Simulating Evolution by Gene Duplication of Protein Features That Require Multiple Amino Acid Residues,” *Protein Science*, 13 (2004): 2651–2664.

Behe and Snoke show in this article how difficult it is for unguided evolutionary processes to take existing proteins structures and add novel proteins whose interface compatibility is such that they could combine functionally with the original proteins. By demonstrating inherent limitations to unguided evolutionary processes, this work gives indirect scientific support to intelligent design.

- W.-E. Loennig & H. Saedler, “Chromosome Rearrangements and Transposable Elements,” *Annual Review of Genetics*, 36 (2002): 389–410.

This article examines the role of transposons in the abrupt origin of new species and the possibility of a partly predetermined generation of biodiversity and new species. The authors’ approach in non-Darwinian, and they cite favorably the work of Michael Behe and William Dembski.

- D.K.Y. Chiu & T.H. Lui, “Integrated Use of Multiple Interdependent Patterns for Biomolecular Sequence Analysis,” *International Journal of Fuzzy Systems*, 4(3) (September 2002): 766–775.

The opening paragraph of this article reads: “Detection of complex specified information is introduced to infer unknown underlying causes for observed patterns [10]. By complex information, it refers to information obtained from observed pattern or patterns that are highly improbable by random chance alone. We evaluate here the complex pattern corresponding to multiple observations of statistical interdependency such that they all deviate significantly from the prior or null hypothesis [8]. Such multiple interdependent patterns when consistently observed can be a powerful indication of common underlying causes. That is, detection of significant multiple interdependent patterns in a consistent way can lead to the discovery of possible new or hidden knowledge.” Reference number [10] here is to *The Design Inference*.

- M.J. Denton & J.C. Marshall, “The Laws of Form Revisited,” *Nature*, 410 (22 March 2001): 417; M.J. Denton, J.C. Marshall & M. Legge, (2002) “The Protein Folds as Platonic Forms: New Support for the pre-Darwinian Conception of Evolution by Natural Law,” *Journal of Theoretical Biology* 219 (2002): 325–342.

This research is thoroughly non-Darwinian and teleological. It looks to laws of form embedded in nature to bring about biological structures. The intelligent design research program is broad, and design like this that’s programmed into nature falls within its ambit.

- J. Barham, “Biofunctional Realism and the Problem of Teleology,” *Evolution and Cognition*, 6(1) (2000): 2–34.

This paper looks to self-organizational properties of matter to argue for a fundamental teleology or intelligence as responsible for the origin and evolution of biological systems. The teleology here is nonreductionist but rather emergentist. Barham’s approach is thus thoroughly non-Darwinian. And although his approach does not locate teleology in an extramaterial source, it does argue that teleology plays an ineliminable role in biological origins and diversification.

- M. Barbieri, *The Organic Codes: The Birth of Semantic Biology* (Ancona, Italy: peQuod).

This monograph summarizes Marcello Barbieri’s longstanding work in formulating a semantic, and therefore intelligence-based, biology. Barbieri has published aspects of this monograph in such peer-reviewed journals as *Journal of Theoretical Biology* and *Rivista di Biologia* (see the monograph’s bibliography).